Helping you achieve your installation needs!

Direct Connect ®
is one of the largest manufacturers of products specifically for the custom installation of audio, video, security, telecom and data networking industry.

Our extensive product line
offers items in the categories of bulk wire and cable, connectors, installation hardware, interconnect cables, distribution panels, a/v transceivers, cameras, media servers, baluns, mounts, tools and wall plates—virtually everything a custom installer needs!

Since 1996, DirectConnect ®
has offered unique products that provide solutions to everyday installation headaches. How do we come up with these ideas? By listening to you, the professional, who battles in the field and is looking for someone on the front line he can rely on.

The Finest Name in Audio/Video Products and Accessories

DirectConnect®
Houston, Texas 77027
Phone 800.531.3224

Would it make your day to know that someone is waiting to hear from you?
We are. Your DirectConnect® representative is ready to take your call.
Or if you prefer, contact us online at ...

http://www.directconnecthome.com

High Speed HDMI™ Cat5e/6 SUPER Extender

DCC5DHX .17942

HIGH SPEED HDMI™ DUAL CAT5E/6 SUPER EXTENDER

USER MANUAL

DirectConnect® has been working on solutions for custom installers / system integrators who cannot get the range needed from HDMI™ cables. This high-performance DirectConnect® Super Extender via dual (2) CAT5e or CAT6 with cross stand inside UTP cable is the ideal solution for professional home theater installers and home theater enthusiasts. This solution uses dual Cat5e/6 cables as transmission media. HDMI™ cables become extremely expensive and potentially unreliable at long lengths. They are typically difficult to install with stiff heavy wire needed to overcome signal loss at longer distances. This HDMI™ Super Extender allows installers to use standard Cat5e and Cat6 with cross stand inside UTP cables to extend 1080P HDTV signals up to 197 feet (60 meters). It exceeds limitations of HDMI™ cables and the use of CAT5e/6 cables permits installers the flexibility and convenience of crimping custom cable lengths.

The use of HDMI™ Extenders with distribution amplifiers (splitters) offer unlimited solutions for multiple HDTV displays devices in retail and show environments.

- Plug and play: Installs in seconds, no extensive configuring required
- Auto-adjustment of feedback, equalization, and amplification.
- Supports HDMI™ up to full 1080P & 8-bit per channel (24 bit all channel) deep color
- Video amplifier bandwidth: 165MHz/1.65Gbps per channel (4.95Gbps all channel)
- Dual (2) Cat5e/6 UTP cables with cross stand inside, can substitute an HDMI™ cable to achieve long distance transmission of 197 feet (60 meters).
- Supports highest video resolution 1080p, HDMI™ and IEEE-568B standard
- Supports uncompressed 2 channel audio such as LPCM
- Supports compressed audio such as DTS Digital, Dolby Digital (Including DTS-HD and Dolby True HD)

IMPORTANT: If you do not understand correct installation instructions, please consult your installation specialist.

Thank you for choosing DirectConnect® Products

Dear Customer

Thank you for purchasing this DirectConnect® product. For optimum performance and safety, please read these instructions carefully before connecting, operating, or adjusting this product. Please keep this manual for future reference.

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Liability Statement

1. *Every effort has been made to ensure that this product is free of defects. DirectConnect® cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user of the hardware to check that it is suitable for his/her requirements and that it is installed correctly. All rights reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.*
2. *DirectConnect® reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.*
3. *All third-party trademarks and copyrights are recognized.*

IMPORTANT: If you do not understand correct installation instructions, please consult your installation specialist

* DirectConnect® is a registered trademark.
*HDMI™ is a registered trademark
*UL® is as registered trademark of Underwriters Laboratories.

6.0 Limited Warranty

Should any consumer product from DirectConnect® fail due to defects in materials or workmanship within two years from the date of the original sale to the end-user, DirectConnect® guarantees replacement of the defective product at no cost. Freight charges for the replacement unit will be paid by the customer. A copy of the invoice showing the item number and date of purchase (proof-of-purchase) must be submitted with the defective unit to constitute a valid in-warranty claim.

Units that fail after the warranty period has expired may be returned to the factory for repair at a nominal charge, if not damaged beyond the point of repair. All freight charges for out-of-warranty returns for repair are the responsibility of the customer. Units returned for repair must have a Return Authorization Number assigned by DirectConnect®.

This is a limited warranty and is not applicable for products which, in our opinion, have been damaged, altered, abused, misused, or improperly installed. DirectConnect® makes no other warranties either expressed or implied, including limitation warranties as to merchantability or fitness for a particular purpose. Additionally, there are no allowances or credits available for service work or installation performed in the field by the end user.

Thank you for choosing DirectConnect® products

IMPORTANT: If you do not understand correct installation instructions, please consult your installation specialist

* HDMI™ is a registered trademark.
* DirectConnect® is a registered trademark.
*DPL Rating™ is a registered trademark.
*UL® is as registered trademark of Underwriters Laboratories.

2.0 FEATURES

This high-performance DirectConnect® Extender via CAT5e or CAT6 with cross stand inside UTP cable has many benefits and features that enable it to perform in a superior manner. Among those benefits and features you will find:

- HDMI™ cable length is fixed and unchangeable after it is produced. HDMI™ connectors can only be soldered or terminated by the professional manufacturers that produce them, the installer and/or users cannot reduce or increase then by themselves. However Cat5e & Cat6 with cross stand inside UTP cables are available everywhere and be processed easily.
- HDMI™ cables are not easy to bend and the connectors are large to pull through conduit and the wall. However, Cat5e/6 cable has no such problems.
- Uses Cat5e or Cat6 with cross stand inside UTP cable to substitute for HDMI™ cable to achieve long distance transmission without signal loss.
- Auto-adjustment of feedback, equalization and amplification. The user does not need to adjust these variables to compensate for the length of the cable.
- Supports up to1080p, uncompressed 2 channel audio, and IEEE-568B standard.

3.0 PACKAGE CONTENTS

Before attempting to use this DirectConnect® unit, please check the packaging and make sure the following items are contained in the shipping carton:

- DirectConnect® HDMI™ Extender One (1) Transmitter and one (1) Receiver
- One (1) 5 Volt DC Power Adapters
- User's Manual

Note: Please retain the original packing material in case you need to return the unit. If you find any items missing, contact DirectConnect® immediately (800.531.3224). Please have the model number, serial number, and invoice available for reference when you call.

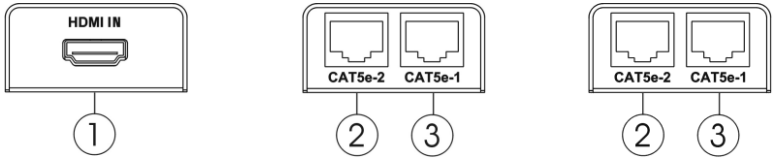
4.0 CONNECTION AND OPERATUION

1) Connect the HDMI™ signal source to the sender unit input port (HDMI™ IN)
   * Please refer to connection diagram section (Page 5).
2 & 3) Connect dual Cat5e or Cat6 with cross stand inside UTP cables between the transmitter and receiver units. Please use EIA/TIA-568 termination (T568B).
4) Connect the HDMI™ display device to the receiver unit output port (HDMI™ OUT)
5) Insert the DC side of the 5v power supply into the receiver before connecting to the wall outlet. Then connect the AC side of the power supply into the wall outlet (ideally the AC power should be surge suppressed and filtered).

Attention: Insert/Remove cables gently & avoid twisting/kinking your HDMI™ cables.

4.1 PANEL DESCRIPTIONS

HDMI™ Extender Transmitter

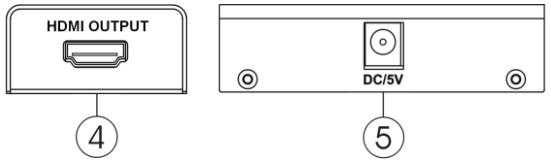


1 - HDMI™ Input

2 - Cat5 Output – 2
3 - Cat5 Output – 1

2 - Cat5 Output - 2
3 - Cat5 Output - 1

HDMI™ Extender Receiver

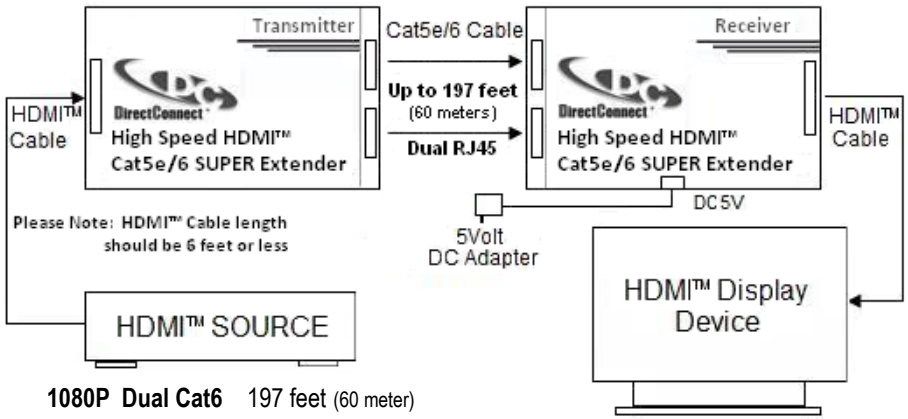


4 - HDMI™ Output

5 – DC Input Power

Please use EIA/TIA-568 termination (T568B) and do not apply DC power to unit until all connections are made.

4.2 CONNECTION DIAGRAM



1080P Dual Cat6 197 feet (60 meter)

Note: **In order to achieve the highest transmission quality, please choose unshielded Cat5e or Cat6 and terminate with metal RJ-45 connectors. Higher-resolutions and longer transmission distances require low skew cables for the best performance.**

1. The cables with lower quality will not achieve the perfect transmission effect and long distance.
2. Theoretically the function of this product is normal when adopting short distance transmission.

If this product cannot transmit long distance, there may be quality problems in the transmission cables.

5.0 TROUBLESHOOTING

If this DirectConnect® product does not appear to be functioning, please make certain that the source and the destination device connected to the unit are functioning correctly. If other problems exist please check the conditions below carefully.

In the event of problems, first make certain that the dual Cat5/6 cables are not longer than specification. Next, make certain that the HDMI™ Extenders are receiving power.

If all is well in these areas, remember that HDMI™ devices communicate with one another so the source devices and destination device must be fully HDMI™ capable. If you experience problems using the HDMI™ Extender, you should attempt to determine what is wrong by attaching each of the source devices – one at a time – directly to the destination device using the same cables you are using with the expanded system. This is a way of determining if the problem is due to bad cables or a problem with the other devices. If you are unable to obtain a signal using this simplified path, double check the cables, the source device(s) and/or the destination device.

CONDITION	POSSIBLE SOLUTIONS
No display image/LED light on Extender Receiver is OFF	Is the power adapter connected? If a power strip is used, is the ON/OFF switch set to "ON" position?
No display image/LED light ON Transmitter & Receiver are ON	Is the display unit turned on? Is the display unit set to the correct video input? Are your HDMI™ and/ or Cat5e/6 cables damaged? Are the cables connected properly? Please refer to the connection diagram.
Image without sound **Note**: That units connected with a DVI adapter will not have sound – DVI is a video-only connection standard	1- Check the display unit's volume 2- Turn off the HDMI™ source (DVD, PS3 etc.) and power on again. If there is still no sound, then: 3- Unplug the power adapter on the Extender transmitter and receiver unit for 10 seconds and then plug in again. 4- Repeat step 2 again if still not working. **Note:** Some devices not HDMI™ certified may have compatibility problems.
Poor picture quality (snow, sparkles, banding, etc)	Examine the HDMI™ and/or Cat 5e/6 cable and replace with new cables if possible. To ensure that the extender units are operating correctly, test with the shortest HDMI™ and/or Cat 5e/6 cable possible. Longer or inferior/ damaged cables will compromise image quality. Use only Cat5e/6 UTP cable with cross stand inside for the best results possible.

DO NOT open the HDMI™ extender boxes. There are no user repairable parts inside. Once opened, DirectConnect® is not responsible. For other problems, please contact DirectConnect® at 800.531.3224. http://www.directconnecthome.com

5.1 NON-HDCP-COMPLIANT DEVICES

If a DVI device does not appear to work, make certain that the device is HDCP-compliant. A non-HDCP-compliant DVI device will not work with a signal that has HDCP encoding present.

Notice: DirectConnect® reserves the right to make changes in the hardware, packaging and/or any accompanying documentation without prior written notice.

1.0 SPECIFICATIONS

Signal Inputs/Output	
Signaling rates	1.65Gpbs x 3
Signal Inputs/Output	
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Maximum Single Link Range	1920X1080P
Output Video	HDMI™ + HDCP1.0/1.1
Video format supported	
DTV/HDTV	480i/576i/480p/576p/720p/1080i/1080P
Digital Signal I/O	
HDMI™ Compliance	Yes - standard
Operating Frequency	
Frequency	Up to 165MHz
Vertical Frequency Range	50/60Hz
Video Amplifier Bandwidth	1.65Gpbs/165MHz
Resolutions (HDTV)	
Interlaced(50&60Hz)	480i,576i,1080i
Progressive(50&60Hz)	480p,576p,720p,1080p
Mechanical	
Size(H-W-D)	1.77" x "0.98 x 3.19" (45 x 25 x 81mm)
Weight(Net)	8.68 oz. (246grams)
Warranty	
Limited Warranty	2 Year Parts and Labor
Environmental	
Operating Temperature	32^{0}F - 158^{0}F (-0^{0}C + 70^{0}C)
Operating Humidity	10% to 85 % RH (no condensation)
Storage Temperature	14^{0}F - 176^{0}F (-10^{0}C + 80^{0}C)
Storage Humidity	5% to 90% RH (no condensation)
Power Requirement	
5 Volt DC Power Adapter	5V DC@2A Power Consumption: 5 Watts maximum
Accessories	
(1) 5 Volt DC Power Adapter UL,CE, & FCC	100-240v, 50-60Hz to 5.0vdc, 2000mA
User Manual	English Version

Note: Specifications are subject to change without notice